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cyclonic collection device.

WHAT IS CLAIMED IS:

	1	1. A method of detecting the presence or absence of <i>Bacillus anthracis</i> in a
	2	test sample, the method comprising:
	₈ 3	contacting a test sample with a capture reagent that can bind to a
	A	Bacillus anthracis surface array protein, wherein the capture reagent forms a complex with
	5	the surface array protein if the surface array protein is present in the test sample; and
	6	detecting whether surface array protein is bound to the capture reagent,
	7	wherein the presence of surface array protein is indicative of the presence of Bacillus
	8	anthracis in the test sample.
11 mm 15m 15m 11m 11m	1	2. The method of thim 1, wherein the surface array protein comprises a
1	2	polypeptide having an amino acid sequence of SEQ ID NO:1.
	1	3. The method of claim 1, wherein the <i>B. anthracis</i> strain is encapsulated.
8"" o el a"" o al a u" o el	1	4. The method of claim 1, wherein the capture reagent comprises an
	2	antibody which binds to surface array protein.
	1	5. The method of claim 4, wherein the antibody is a recombinant antibody.
	5	6. The method of claim 5, wherein the antibody is a recombinant
	2	polyclonal antibody.
	1	7. The method of claim 5, wherein the antibody is a monoclonal antibody.
	1	8. The method of claim 1, wherein the test sample is collected from a site
	2	of suspected or threatened anthrax contamination.
	1	9. The method of claim 8, wherein the test sample is collected using a

	1	10. The method of claim 1, wherein the test sample is not cultured prior to
	2	contacting with the capture reagent.
	1	11. The method of claim 1, wherein the capture reagent is immobilized on a
	2	solid support.
	1	12. The method of claim 11, wherein the solid support is a microtiter dish.
	, 1	13. The method of claim 11, wherein the capture reagent is immobilized on
	UNE2)	the solid support prior to contacting the capture reagent with the test sample.
	~ /	
	1	14. The method of claim 1, wherein the method can detect B. anthracis at
1.11 == =	2	concentrations as low as about 10,000 cfu/ml.
1, 2 		and the second s
*: <u>.</u>]	1	15. The method of claim 14, wherein the method can detect B. anthracis at
13	2	concentrations as low as about 5,000 cfu/ml.
13	1	16. The method of claim 15, wherein the method can detect B. anthracis at
13	2	concentrations as low as about 1,800 cfu/ml.
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	1	17. The method of claim 1, wherein the detection of the surface array
	2	protein is performed by contacting the surface array protein with a detection reagent that can
	3	bind to the surface array protein.
•		10 M 1 1 C 1 in 17 who win the detection reasont comprises on
	1	18. The method of claim 17, wherein the detection reagent comprises an
	2	antibody which binds to surface array protein.
	1	19. The method of claim 17, wherein the detection reagent binds to a
<	.2	different epitope of the surface array protein than does the capture reagent.
	Supply	
	J.	20. The method of claim 17, wherein the detection reagent comprises a
	2	detectable label.

	1	21. The method of claim 20, wherein the detectable label is selected from
	2	the group consisting of a radioactive label, a fluorophore, a dye, an enzyme, and a
	3	chemiluminescent label.
	1	22. A kit for detecting the presence or absence of Bacillus anthracis in a
1.10	2	sample, the kit comprising:
	3	a solid support upon which is immobilized a capture reagent that can
	4	bind to a surface array protein of Bacillus anthracis; and
	5	a detection reagent which binds to the surface array protein.
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1.d 1.3	1	23. The kit of claim 22, wherein the solid support is a microtiter dish.
: := : :=	1	24. The kit of claim 22 wherein the capture reagent is an antibody.
*.d	_	of The Lie Calain 24 and artificity day is a recombinant polyclonal
	S. S	25. The kit of claim-24, wherein the antibody is a recombinant polyclonal
12 (13	antibody.
5 0 0	-	26. The kit of claim 24, wherein the antibody is a monoclonal antibody.
SUB		20. The left gardini 21, wherein the united by 12 is a second
ļ. a	1	27. The kit of claim 22, wherein the capture reagent is a mixture of
Syl	D az	monoclonal and polyclonal antibody preparations.
	1	28. The kit of claim 22, wherein the kit further comprises written
	2	instructions for using the kit to determine whether a test sample contains B. anthracis.
	1	29. The kit according to claim 22, wherein the kit further comprises a
	2	positive control that comprises a polypeptide that comprises an antigenic determinant of a B.
	3	anthracis surface array protein.
	1	30. The kit according to claim 29, wherein the surface array protein
	2	comprises an amino acid sequence of SEQ ID NO:1.

31. A recombinant polyclonal antibody preparation that specifically binds to an antigenic determinant of a surface array protein of *Bacillus anthracis*.

32. The recombinant polyclonal antibody preparation of claim 31, wherein the surface array protein comprises an amino active quence of SEQ ID NO:1.

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